SBC's Project Pronto is the most visible example of this anticompetitive network redesign, which would, among other things, entity foreclose facilities-based competition for consumers of broadband services. Meanwhile, other ILECs are already jumping on the bandwagon. Recently, in Massachusetts, as well as in its comments in this docket, Verizon announced its intention to follow SBC's lead.[153] Together, these two ILECs control access to customers in the majority of the nation, including the lion's share of key major metropolitan areas. BellSouth and Qwest have not yet stated their intentions, no doubt waiting for further Commission action.

Given the uniformity of this ILEC approach to network redesign, the Commission's rules in this docket become absolutely crucial to ensuring that the Act's purpose of opening local networks is implemented and to maintaining open network architectures mandated by Section 256 of the Act. SBC and other ILECs hope the Commission will lose sight of these overarching goals as it considers the many issues associated with NGDLC. But the Commission must not fail to see the forest for the trees. When examining the issues of network technology associated with unbundling next generation DLC, the Commission must always keep in mind the broader purpose of the Act, to eliminate monopoly control of the local network.

SBC argues, initially, that its network should not be unbundled because, in its erroneous view, the Act's requirements only apply to its network as it stood when the Act was passed.[154] As a result, SBC contends that this "new" network does not come under the Act's purview.[155]

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[153] Verizon Comments at 36-37.

[154] SBC Comments at 56-57; *see* Illinois Commerce Commission, Proposed Implementation of High Frequency Portion of Loop (HFPL) Line Sharing Service, Docket No. 00-0393, Hearing Tr. (Carol Chapman, SBC Communications, Inc.) (October 18, 2000) ("Chapman Tr.") at 779-781.

[155] SBC Comments at 57; Chapman Tr. at 779-781.

SBC's brash gambit must fail. Numerous provisions of the Act not only contemplate a continuing obligation to open the local network, they require it.

For example, nothing in Section 251 limits unbundling to the "existing" network.[156] In addition, as discussed in more detail below, Section 256 establishes the specific obligation to maximize network access on a continuing basis.[157] Section 253 precludes actions by a state or local regulatory agency that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."[158] Section 271 specifically requires an inquiry by regulators to confirm that the local markets are open *and will continue to be open.*[159] Indeed, the stated purpose of the Act was to open local markets to competition.[160]

Next, SBC argues that the latest network technology, utilizing NGDLC, cannot be unbundled.[161] Not only does this position miss the point, as discussed above with regard to line cards, it is also false. The point that SBC, and other ILECs, hope this Commission will overlook is that they are not permitted, in the post-Act era, to remonopolize their networks by deploying technologies that they then close to competition. Yet, the implication from the testimony of at least one SBC regulatory witness is that this is exactly what SBC plans to do.[162]

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[156] *See* 47 U.S.C. § 251(c).

[157] 47 U.S.C. § 256; *see also* Rhythms Comments at 6, 29, 67, 71, 75.

[158] 47 U.S.C. § 253.

[159] 47 U.S.C. § 271.

[160] Preamble to Telecommunications Act of 1996, (The purpose of the 1996 Act is to "promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage rapid deployment of new telecommunications technologies.").

[161] SBC Comments at 66; *see also* Verizon Comments at 36-38.

[162] Chapman Tr. at 808 (noting that the ability to exclude competitors line cards was a key issue in deciding to deploy Project Pronto).

Again, SBC's position cannot prevail. There is no technical reason that SBC could not have designed its network to allow access by competitors on an unbundled basis particularly since its redesign has been in planning for more than four years.[163] False ILEC claims of technical infeasibility are not without precedent. For instance, in the 706 proceedings before this Commission in March 1998, the ILECs all claimed that it was not technically feasible to unbundle loops for use by DSL carriers, each ILEC filed petitions to be exempted from unbundling their networks to carriers seeking to provide advanced services.[164] And yet, before this Commission acted on their petitions, the ILECs began aggressively deploying their own DSL so that they could respond to broadband competition from CLEC DSL carriers. The rhetoric of technical infeasibility simply evaporated. The same situation exists here. It is technically feasible to deploy an unbundlable NGDLC loop. The ILECs simply don't want to.

Instead, SBC, soon to be followed by Verizon, made the *strategic* decision, behind the backs of this Commission and competitors, to deploy NGDLC in a manner that it now claims cannot be unbundled. For instance, SBC's Project Pronto planning was undertaken without any consultation with the CLEC competitors, including Rhythms, that would also access that network.[165] And yet, during the planning stages, the needs of the SBC data affiliate were fully accommodated. The result is that while SBC's own data needs were specifically accounted for, the needs of its competitors were not.

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[163] Lube Tr. at 209-212; *see infra* II.C.4.

[164] SBC Comments In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the 1996 Telecommunications Act, CC. Docket No. 98-146 (September 8, 1998) ("SBC Comments") at 8.

[165] Chapman Tr. at 772-777; Project Pronto Product Overview Transcript at 91.

Likewise, as Commission Furchtgott-Roth observed,[166] SBC voluntarily agreed to merger conditions, in order to secure approval of a merger that allowed it to control the local network in approximately a third of the nation. Those conditions, which were the subject of extensive "negotiation" between SBC and the Commission, specifically provided that the separate data affiliate would "own" the DSLAM functionality. These conditions were proposed by SBC and agreed to by SBC with full awareness of its Project Pronto plans, of which neither competitors, investors nor the Commission were advised about until after the merger approval was granted.[167] Yet, mere months later, SBC approached this Commission for release from those commitments.[168]

So, it is clear that SBC designed and developed Project Pronto in a manner that it now claims precludes facilities-based competition. It did so while falsely assuring this Commission that its merger conditions would guard against such anti-competitive conduct, because the

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[166] *SBC Project Pronto Order*, Dissenting Statement of Commissioner Harold Furchtgott-Roth. (Commissioner Furchtgott-Roth wrote: "[i]t was . . . entirely foreseeable, at the time that the conditions were being negotiated, that SBC would not be able to pursue its plan for deploying digital subscriber line services consistent with the merger conditions. In view of this fact, I do not understand why the Bureau insisted upon or SBC agreed to conditions that required an SBC separate affiliate to own equipment used to provide advanced services, particularly since the Bureau now seems to think that the public interest is actually better served by *not* imposing this condition.").

[167] SBC filed for approval of the merger on July 24, 1998. *see* Merger of SBC Communications Inc. and Ameritech Corporation, Description of the Transaction, Public Interest Showing, and Related Demonstrations (July 24, 1998). It first submitted proposed voluntary conditions on July 29, 1999. SBC/Ameritech Proposed Conditions (July 29, 1999). Throughout the summer, SBC continued to submit revised voluntary commitments, which proposed that the affiliate own the DSLAM functionality. SBC/Ameritech Merger Conditions, Second Version (August 27, 1999) at 4. On October 6th, the Commission approved the merger, and accepted SBC's voluntary commitments. *Applications of Ameritech Corp., Transferor, and SBC Communications, Inc. Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules*, CC Docket No. 98-141, ASD File No. 99-49, Memorandum Opinion and Order (October 8, 1999) ("*Merger Order and Conditions*"). On October 18th, SBC released the Investor Briefing detailing its plans to deploy Project Pronto. *See* Rhythms Comments at Attachment 5.

[168] *See SBC February 15 Letter.*

affiliate would obtain advanced services in the same way as the ILEC. The Commission can and must correct this maneuver by SBC, before the other ILECCs follow their lead.

Not only does the Commission have the authority under Section 251(c) to require SBC to provide competitors unbundled access to the NGDLC loop network, but also Section 256 of the Act was specifically enacted to ensure that such rules are in place. Section 256 seeks to ensure "nondiscriminatory accessibility by the broadest number of users and vendors of communications products and services to public telecommunications networks used to provide telecommunications service through . . . coordinated public telecommunications network planning and design by telecommunications carriers and other providers of telecommunications service."[169]

The Commission has responsibility to oversee this coordination of network planning and to participate in appropriate industry standards-setting organizations.[170] Without CLEC input and Commission oversight in the network planning and design of the loop network served over NGDLC, the ILECs' networks will revert to being discriminatory, closed and inaccessible. The proposed rules appended to these comments can and should be adopted by the Commission.

B. THE RECORD IS CLEAR THAT THE COMMISSION MUST ENSURE THAT EXISTING UNBUNDLING RULES APPLY FULLY TO NGDLC ARCHITECTURE.

As Rhythms noted in its opening comments, the Commission's unbundling rules must apply fully in the NGDLC loop network.[171] Thus, the Commission-mandated loop, subloop, and

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[169] 46 U.S.C. § 256(a).

[170] 47 U.S.C. § 256(b).

[171] Rhythms Comments at 75; ATG Comments at 4; AT&T Comments at 34; CompTel Comments at 12; Conectiv Comments at 25; IP Communications Comments at 1; WorldCom Comments at 15; Mpower Comments at 54.

transport unbundling options should all continue to be made available to CLECs.[172] In addition, the Commission must clarify the rules regarding unbundled packet switching to ensure that its rules are not being inappropriately construed to foreclose competitive entry by CLECs.[173] In short, ILEC refusals to unbundle the NGDLC network must not be tolerated by the Commission. Rhythms has appended proposed language to ensure that ILEC networks continue to be open in the ILEC networks as they evolve.[174]

Loops. All CLECs must continue to be able to obtain unbundled loops, including all the features, functions and capabilities of NGDLC loops, for the provision of their services.[175] The Commission should clarify, as suggested in the Rules Appendix, that the definition of an unbundled loop as extending from the main distribution frame to the network interface device does not change depending on either the technology of the loops or the services that the competitor will provide over the loop facilities. This has been true for four years for both voice DS0s and IDSL loops. This clarification ensures that the Commission's longstanding policies requiring technological and provider neutrality are upheld.

Since the *Local Competition Order*, this Commission has repeatedly concluded that its unbundling rules are to be implemented to assure technological neutrality and not to favor or disadvantage any service provider.[176] By so doing, the Commission seeks to stimulate the provision of innovative products and services to consumers.[177] ILEC refusals to provide data

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[172] Rhythms Comments at 76; Joint Commenters Comments at 70-71.

[173] Rhythms Comments at 89-92; AT&T Comments at 27; Telergy Comments at 22.

[174] *See Attachment* 1, Rhythms Rules Appendix (November 14, 2000).

[175] Rhythms Comments at 76; AT&T Comments at 24; Corecomm Comments at 48; Mpower Comments at 52; CTSI Comments at 42; DSLNet Comments at 16; Telergy Comments at 51.

[176] *Local Competition Order* ¶¶ 385, 506.

[177] *Local Competition Order* ¶ 4; *Advanced Services Order* ¶ 21.

carriers with the same loop facility that they provide to voice carriers not only violate these well-founded Commission policies, they violate principles of nondiscrimination.[178]

The Commission should also reiterate that all the features, functions and capabilities of the loop be made available for use by CLECs to provision services as the CLECs see fit over the loop to the CLEC customers.[179] Again, the Commission should clarify that the right to use the features, functions and capabilities, of an NGDLC provisioned loop specifically extends to data CLECs providing DSL services.[180] And, as indicated above and in Rhythms opening comments, the ability to access and use these features and capabilities includes specifically the ability to configure the parameters of the line card and fiber facilities in that loop.[181] In so doing, the Commission will reinforce its policy that ILECs may not discriminate among service providers on the basis of the service offerings they make available to end users.[182]

Not only do the CLECs have the right to place line cards at remote terminals, the ILECs' unbundling obligations also require that ILECs provide competitors with access to the management layer of the fiber portion of the loop as a feature, function and capability of that loop. The management layer is the embedded operational communications channel, which permits remote telemetry to each remote terminal site via a partitioned, segregated interface.[183]

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[178] Rhythms Comments at 77; WorldCom Comments at 10.

[179] 47 C.F.R. § 51.319; Rhythms Comments at 77; AT&T Comments at 41-42.

[180] Rhythms Comments at 78.

[181] Rhythms Comments at 81.

[182] *SBC Project Pronto Order* ¶ 13, (Noting Commission policy to "ensure that competing providers of advanced services receive effective, nondiscriminatory access to facilities and services of the merged firm's incumbent LECs that are necessary to provide advanced services."); *see* Rhythms Comments at 81; ATM Comments at 5; AT&T Comments at 17; Covad Comments at 15; Focal Communications Comments at 8; Metromedia Comments at 24; Mpower Comments at 21; DSLNet Comments at 34;Telergy Comments at 29; CoreCom Comments at 15.

[183] Rhythms Comments at 82-83; Rhythms Joint Declaration at ¶¶ 116-119; Rhythms Comptel Comments at 7, n.29; *see SBC Project Pronto Order* ¶ 28.

Using this channel, a complete inventory of line cards located at each remote terminal can be remotely obtained by serial number and type.[184] For instance, the element manager in Alcatel's Litespan DLC is capable of remotely accessing, interrogating and provisioning all hardware and software channel unit settings and features; can manage all alarms, facility performance remotely; and works with the ILECs' legacy OSS.[185]

Until standards are established that provide for interoperability, access to multiple element managers are necessary to establish the parameters for a CLEC service. For example, in the case of SBC's Project Pronto, there is an Alcatel-developed element manager for the DLC and a Lucent-developed element manager for the OCD. To configure a PVC, requires access to both element managers—one to talk to the DLC on one end of the pipe and one to talk to the OCD on the other end. Once it had both systems, SBC developed the SOLID program to talk to both element managers and allow flow-through coordination to establish a preselected set of parameters. Once specifications for both systems are available, the industry could move toward interoperable element managers and access to them. The Commission should prompt such a move because CLEC access to these element managers is essential to set Quality of Service parameters consistent with their customer service level agreements that enable them to differentiate their service.

ILECs argue that CLECs providing DSL should not be able to have the whole loop, but only the copper subloop between the remote terminal and the end user.[186] The basis for these arguments is that the feeder portion of the loop has been transformed into "packet switching,"

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[184] *Id.*

[185] *Id.*

[186] BellSouth Comments at 6; SBC Comments at 36, 64; Verizon Comments at 8-9.

which they contend they need not unbundle. The Commission must point out the errors in these ILEC assumptions.

Packet Switching. The Commission's existing rules on packet switching in no way support the positions the ILECs have taken in refusing to provide unbundled fiber between the remote terminal and the central office.[187] Nevertheless, because these ILEC positions are preventing CLECs from deploying broadband services to customers served over an NGDLC loops, Commission clarification of this point is required.[188] First, the Commission should specifically note that its definition of "packet switching" refers simply to the DSLAM functionality and expressly does not include the loop function—transmission over the fiber feeder between the remote terminal and the central office. This clarification will crystallize the ILEC obligation to provide DSL carriers with fiber loop facilities between the RT and the central office.

The Commission should also reiterate the conditions under which CLECs may obtain unbundled packet switching, or DSLAMs. To ensure that the nondiscrimination requirements of 251(c)(6) are met, the Commission should once again reiterate that where an ILEC deploys either DSL line cards or traditional DSLAMs in a remote terminal, facilities-based CLECs must have access to unbundled packet-switching at their central office-based collocation arrangements, if the CLECs cannot place their own line cards or traditional DSL equipment in that remote terminal.[189] In making this conclusion the Commission should be clear that the ability to collocate a DSLAM *at* the remote terminal is not satisfied by allowing a CLEC to place

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[187] Rhythms Comments at 89; Rhythms Reply Comments in *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, FCC 99-238 (June 10, 1999) at 38, n. 132.

[188] *See* SBC Comments at 59-60; Verizon Comments at 35.

a DSLAM *near* the remote terminal and then interconnect that equipment to the ILEC remote terminal.[190] Similarly, the Commission should clarify that Section 251(c)(6) requires CLECs to be able to place the same type of equipment in the remote terminal as the ILEC, although, of course, CLECs are not limited to this type of equipment. Thus, CLECs have the right to collocate line cards in the NGDLC system where the NGDLC system has been modified to provide process and service through line cards.

Line Sharing. In conjunction with its clarifications regarding packet-switching, the Commission should also take this opportunity to conclude that ILECs must provide CLECs that are line sharing the right to do so over an NGDLC loop. Specifically, the Commission should clarify the statement in footnote 27, in the *Line Sharing Order* that the "[l]ine sharing through the simultaneous use of discrete electromagnetic frequencies on a single wire pair to provide separate communications services . . . is only possible on metallic loops."[191] ILECs have universally regarded this footnote as *the basis* for refusing to provide data CLECs with the line sharing UNE over a NGDLC loop.[192] The Commission must clarify that, the footnote only spoke to technical feasibility at the time of the Order. Now, however, it is clear that line sharing is technically feasible over an NGDLC loop, and accordingly, ILECs must provide it.

In its *Line Sharing Order*, the Commission detailed the myriad public interest benefits of line sharing, particularly to residential customers.[193] Specifically, the Commission determined

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[189] Rhythms Comments at 90.

[190] Rhythms Comments at 91.

[191] In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket Nos. 98-147, 96-98, *Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98*, FCC 99- (rel. Dec. 9, 1999) ("*Line Sharing Order*") at ¶ 17, n. 27.

[192] SBC Comments at 64.

[193] *Line Sharing Order* ¶ 15.

that line sharing "is technically feasible, presents no substantial operational issues, is legally justified, and serves the public interest."[194] A review of SBC's deployment plans for Project Pronto reveals that the very residential customers the Commission sought to benefit are being rolled over to the Project Pronto NGDLC loops.[195] The benefits of line sharing should not be limited to only a subset of customers by an ILECs' unilateral choice of technology.

Rather, the Commission must act now to ensure that the benefits of competitive provision of line sharing are available to those customers by specifically requiring ILECs to provide line sharing to CLECs providing DSL over NGDLC loops. Accordingly, CLEC should be able to carry their data traffic over the full length of the NGDLC loop—from the end user, through the DSLAM at the remote terminal and across the fiber to the central office collocation arrangement.

Subloops. CLECs must have access to all subloop elements in the NGDLC architecture. The Commission must specifically require ILECs to unbundle the NGDLC architecture at the subloop level. ILECs claim that their present subloop offerings comply with the Commission's existing rules.[196] The Commission should clarify that they do not. Specifically, the Commission should require that CLECs be able to obtain any subloop element required to complete the facility between the end user and the central office. Thus, ILEC must offer a subloop element that provides a copper facility between the end user and the remote terminal. Likewise, CLECs must be able to obtain, as a subloop element, the fiber facility that runs from the DLC to the central office OCD, where the ILEC will hand off the signal to a collocated CLEC.

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[194] *Line Sharing Order* ¶ 15.

[195] *See* "Maps of Top Cities in SBC's Service Area, Pre- and Post-Project Pronto", http://www.sbc.com/data/people/alliances/0,2951,5,00.html.

[196] Rhythms Comments at 80-81.

CLECs should also continue to have the option of obtaining unbundled dark fiber deployed in the loop plant.[197] The Commission should clarify, however, that availability of dark fiber subloop is not sufficient to meet ILEC unbundled fiber feeder obligations. Thus, dark fiber subloop should be an additional option to CLECs, but not the only one.

Spare Copper. There is substantial support in the record for the Commission to require ILECs to give CLECs access to spare copper, even after deployment of NGDLC in a distribution area.[198] Rhythms urges that the Commission confirm CLECs' right to access to spare copper where technically feasible and require notice to CLECs of planned removals of copper plant with Commission approval required for any removals that are contested.[199] This rule will ensure that carriers deploying different varieties of DSL service, such as SDSL, that may not yet be supported by the NGDLC technology, can still offer their innovative services to customers.[200] However, as indicated in our initial comments, there is a real concern over interference from RT-based ADSL services that must be addressed by the Commission.[201] Thus, the Commission should rule that, in upgrading their networks from copper to fiber, the ILECs cannot interfere with service offerings being made available by competing carriers.[202]

Resale. Finally, the record supports an explicit Commission conclusion that the ILEC resale offerings, such as SBC's "Broadband Service", are insufficient to meet ILEC *unbundling*

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[197] 47 C.F.R. § 51.319.

[198] Rhythms Comments at 88; AT&T Comments at 51; Focal Communications Comments at 33; IntraSpan Comments at 9; Sprint Comments at 38; WorldCom Comments at 15.

[199] Rhythms Comments at 88.

[200] WorldCom Comments at 14.

[201] Rhythms Comments at 89; *see also* WorldCom Comments at 14; CompTel Comments at 17; Sprint Comments at 35.

[202] Rhythms Comments at 88; WorldCom Comments at 14.

obligations.[203] Unbundling is the 1996 Act's requirement that enables competitors to deploy their own facilities to provide services to end users. This Commission explicitly articulated the benefits of such facilities-based competition.

The Commission, for example, has expressly recognized that Sections 251 and 252 were enacted to open local telecommunications markets to facilities-based competition.[204] The Commission has found that this competition is important because "[o]nly facilities-based competitors can break down the incumbent LEC's bottleneck control over local networks and provide services without having to rely on their rivals for critical components of their offerings."[205] The Commission has directed ILECs to provide CLECs with nondiscriminatory access to UNE subloops in order to "facilitate rapid development of competition, encourage facilities-based competition, and promote the deployment of advanced services."[206] And, with specific reference to the local loop network, the Commission has previously acknowledged that "[t]he greatest benefits may be achieved through facilities-based competition, and that the ability of requesting carriers to use unbundled network elements . . . is a necessary precondition to the subsequent deployment of self-provisioned network facilities."[207] The Commission must not, and cannot, on the record before it abandon these principles on the premise that a resale offering such as the SBC's "Broadband Service" is good enough.

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[203] Rhythms Comments at 92.

[204] *Local Competition Order* ¶¶ 10-15.

[205] *Promotion of Competitive Networks in Local Telecommunications Markets,* Notice of Proposed Rulemaking and Notice of Inquiry in WT Docket No. 99-217 and Third Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 99-141, ¶¶ 4, 23 (rel. July 7, 1999)("Moreover, only facilities-based competition can fully unleash competing providers' abilities and incentives to innovate, both technologically and in service development, packaging, and pricing. . . . In order for competitive networks to develop, the incumbent LECs' bottleneck control over interconnection must dissipate."). *See also UNE Remand Order* ¶ 7.

[206] *UNE Remand Order* ¶ 207; *see also Id.* ¶ 206.

[207] *UNE Remand Order* ¶ 5.

As Rhythms pointed out with regard to CompTel's petition for reconsideration of the *SBC Pronto Order*, the benefits that the Commission identified in granting SBC's request were likely to accrue to the public regardless of which entity owns the line cards.[208] Yet, the conditions that are imposed on SBC's ability to own those cards do not sufficiently address the competitive deficiencies of the proposal, nor do they allow carriers to sufficiently distinguish their service offerings over the Project Pronto architecture.[209]

Instead, the Commission catalogs, quite rightly, substantial competitive harm from SBC's proposal.[210] "[M]ost significantly, the public loses the benefit of improved systems and processes that accrue to all providers of advanced services because SBC's Advanced Services Affiliate would no longer buy the same inputs used to provide advanced services as facilities-based carriers."[211] Further, "competing carriers would effectively lose the right to obtain similar collocation arrangements on nondiscriminatory rates, terms and conditions."[212] In addition, "unaffiliated carriers lose the benefit of obtaining low-cost OI&M services."[213] Finally, there is increased risk that the conditions "will not be as effective at detecting discriminatory conduct" and the public "may lose the ability to benchmark the quality" of services received by competitors.[214] An ILEC broadband resale offering standing alone does not sufficiently address these concerns.

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[208] Rhythms CompTel Comment at 8-9.

[209] Rhythms Comments at 81; Rhythms CompTel Comments at 8; NorthPoint Comments at 28.

[210] *See SBC Project Pronto Order* ¶ 24; Rhythms CompTel Comments at 8; Rhythms Comments at 93.

[211] *SBC Project Pronto Order* ¶ 24.

[212] *Id.*

[213] *Id.*

[214] *Id.*

First, SBC can withdraw its offering at any time, and in any event the offering has only a limited life under the merger conditions.[215] Second, not every ILEC has an advanced service affiliate that is subject to the same requirements as SBC. Finally—and crucially—SBC's offering does not allow the kind of innovation and differentiation that will lead the vigorous competition sought by the Act.[216]

In its comments in the CompTel petition, ATG argues that "CLECs who resell the SBC offering are limited to SBC's chosen technology and its choice and timing of adoption of other technologies, whether or not compatible with the needs of the CLECs or their customers."[217] The limited parameters that SBC is offering do not yield the kind of service differentiation that is the hallmark of a competitive marketplace as envisioned by the 1996 Act.[218] SBC's decision to allow competitors to provide only the type and speed of DSL that it offers itself prohibits the provision of PVPs over fiber and limits competitors to UBRs for the QoS class.[219] Further, SBC only offers ADSL service, while CLECs provide a wide spectrum of flavors, including ADSL, RDSL, SDSL, IDSL, HDSL2, SHDSL, and VDSL.[220] Therefore, the Commission's conclusion

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[215] Accessible Letter No. CLEC00-171, SBC Broadband Service – Interim Contract Language and Product Availability (Business Processes)(Sept. 6, 2000); *see Merger Order and Conditions* ¶ 367; *see Project Pronto Order* Appendix A, p.44, n. 189.

[216] Rhythms Comments at 68; Rhythms CompTel Comments at 6; Focal Communications Comments at 46-47.

[217] ATG CompTel Comments at 6; *See also* Rhythms Comments at 71.

[218] Rhythms Comment at 68; Rhythms CompTel Comments at 6-7; AT&T Comments at 42.

[219] Comments of Allegiance in *Applications of Ameritech Corp., Transferor And SBC Communications, Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines*, CC Docket No. 98-141, ASD File No. 99-49 (November 2, 2000) ("Allegiance CompTel Comments") at 5; *see* Technical Reference Notice for Broadband Service Phase 1.

[220] Comments of IP Communications in *Applications of Ameritech Corp., Transferor And SBC Communications, Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines*, CC Docket No. 98-141, ASD File No. 99-49 (November 2, 2000) ("IP Communications CompTel Comments") at 5; Comments of ATG CompTel in *Applications of Ameritech Corp., Transferor And SBC Communications, Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines*, CC Docket No. 98-141, ASD File No. 99-49 (November 2, 2000) ("ATG CompTel Comments") at 6-7, n. 9.

that SBC's proposal "enable[s] Rhythms and others to differentiate their product offerings from those of SBC's Advanced Services Affiliate" is incorrect.[221]

Through facilities-based competition, Rhythms, joined by other DSL providers, has been able to generate a notable share of the advanced services market.[222] The Commission should now ensure that facilities-based competition is not foreclosed or converted to simple resale. During the rapid deployment of the Project Pronto NGDLC network, SBC "continues to place other obstacles in the path of CLECs who wish to deploy their own facilities through collocation in the SBC Project Pronto remote terminals."[223]

It is crucial that the Commission not allow SBC to shrink its unbundling obligations in the Project Pronto network. The Commission should expressly clarify that ILEC *resale* offerings, such as SBC's "Broadband Service" offering—while mandatory—do not alone fulfill ILEC obligations to provide interconnection, unbundled UNE or collocation under Section 251(c). To find otherwise would enable ILECs to undermine the statutory and regulatory goal of facilities-based competition and relegate competitors to a purely "resale" role.

C. SBC'S THREAT TO "TAKE ITS BALL AND GO HOME" RUNS CONTRARY TO THE COMPANY'S ACTUAL BEHAVIOR IS HOLLOW, AND MUST BE DISREGARDED.

Nothing in SBC's public statements or actual deployment suggests that SBC has any real plans to dismantle Project Pronto. An extensive review of SBC's public statements to regulators, press investors and the Securities and Exchange Commission reveal no "hedging" on Project Pronto deployment plans. SBC is fully committed to Project Pronto and this Commission's decision to require unbundling will not derail that effort.

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[221] *SBC Project Pronto Order* ¶ 28.

[222] Rhythms July 28 Ex Parte at 2-3.

[223] ATG CompTel Comments at 9; *see also* Sprint Comments at 11.

To illustrate, when SBC witnesses are specifically asked to identify the regulatory conditions under which they will refuse to continue their already significant deployment of Project Pronto, they cannot and will not identify any such conditions.[224] Rhythms has reviewed an extensive amount of publicly available information on Project Pronto and found no public statement in which SBC indicates that it is considering withdrawal of Project Pronto if it does not prevail before the Commission.[225]

SBC is already irreversibly committed to Project Pronto. SBC has signed contracts with its vendors committing to purchase the Project Pronto equipment.[226] SBC is investing $6 billion in 13 states to roll out Project Pronto. And that roll-out is well underway.

SBC is already deploying Project Pronto. SBC readily admits that, despite regulatory uncertainty over line card ownership, it has "proceeded to spend tens of millions of dollars on equipment" and that it was "in the process of making its ADSL service available to millions of potential customers."[227] "By SBC's own pronouncement," Allegiance remarks, "it is zooming ahead in its xDSL deployment."[228] ATG concurs that "SBC is using the interim period to steal a march to market on its competitors through the legerdemain of asset shuffling and redefinition."[229] There is simply no basis for the conclusion that if the Commission allows CLECs to own and place their own line cards or obtain NGDLC UNEs, that Project Pronto is in

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[224] Chapman Tr. at 803-806.

[225] *See Attachment* 2, Compendium of public statements on Project Pronto.

[226] *See* "SBC to Invest $6bn for DSL Roll-Out; $4.5bn for Alcatel", Network Briefing (October 19, 1999); "Alcatel Lands Contract to Supply SBC Web Project", European Report (October 27, 1999); Mark LaPedus, "Cisco, SBC sign ADSL accord--Deal Breaks Alcatel Monopoly, Opens Door to Chip Suppliers", Electronic Buyers' News (April 24, 2000).

[227] Comments of SBC CompTel in *Applications of Ameritech Corp., Transferor And SBC Communications, Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines*, CC Docket No. 98-141, ASD File No. 99-49 (November 2, 2000)("SBC CompTel Comments") at 2.; *see* SBC Comments at 56.

[228] Allegiance CompTel Comments at 6.

jeopardy. Instead, SBC has repeatedly and loudly announced its intentions to continue deployment of Project Pronto.

Perhaps most tellingly, SBC has committed to current and potential investors and the investment community at large that it will pursue Project Pronto. Given the size of the investment, the SEC would require SBC to accurately and truthfully disclose the risks attending its investment. SBC never mentions in any investor briefing,[230] or indeed in any public statement made to the investment community or filed with the SEC,[231] that Project Pronto deployment would cease upon specific repudiation of its regulatory obligations by this Commission. To the contrary, in its investor briefing released October 18, 1999, SBC states "[t]he network efficiency improvements alone will pay for this initiative, leaving SBC with a data network that will be second to none in its ability to satisfy the exploding demand for broadband services."[232]

In addition to SBC's claim that Project Pronto will pay for itself through network efficiencies alone, Project Pronto is SBC's sole response to burgeoning broadband competition. Indeed, Project Pronto was conceived to meet SBC's own business needs.[233] SBC's withdrawal of Project Pronto would prevent SBC from meeting its own business objectives; in essence SBC would be "cutting off its nose to spite its face." SBC faces competition from DSL providers as well as a substantial threat from cable modem services and to an increasing extent from wireless and satellite operators.[234] Thus, SBC has stated that given these other broadband technologies, it

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[229] ATG CompTel Comments at 1.

[230] *See* SBC Investor Briefing.

[231] *See* SBC Communications Inc., Quarterly Report (August 10, 2000); SBC Communications Inc., Quarterly Report (May 10, 2000); SBC Communications Inc., Annual Report (March 10, 2000).

[232] SBC Investor Briefing at 2.

[233] Chapman Tr. at 809-810.

[234] Chapman Tr. at 819-821.

"believes that it is important to promote DSL-based technologies because they use our network as opposed another network."[235] According to SBC, without Project Pronto SBC would have no competitive response to these broadband competitors.

Thus, given that SBC is deploying Project Pronto and has given no real indication to its investors, the market or its competitors that that deployment is in jeopardy, the Commission should feel comfortable acting now to preserve facilities-based competition through unbundling requirements for NGDLC networks and should disregard the idle threat that SBC will "take its ball and go home."

D. THE RECORD SUPPORTS IMMEDIATE COMMISSION ACTION TO REQUIRE ILECS TO MAKE THEIR NGDLC NETWORK ARCHITECTURES AVAILABLE AS UNES TO CLECS COLLOCATED AT THE ILEC CENTRAL OFFICE.

The record in this proceeding fully supports a Commission rule requiring ILECs to make a broadband service such as SBC's available to CO-collocated CLECs as a UNE.[236] This is also consistent with the record responding to CompTel's recent petition for reconsideration of the *SBC Pronto Order*.[237] There, Comptel asked the Commission to conclude that competitors have access to SBC's NGDLC network through unbundled network elements on a nondiscriminatory basis consistent with the ability of SBC's affiliates to purchase UNEs from the SBC ILEC.[238] Commission clarification now that unquestionably and unarguably requires ILECs to unbundle

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[235] Chapman Tr. at 819.

[236] Rhythms Comments at 87-88; *see* NorthPoint Comments at 25.

[237] Public Notice, Comptel Petition for Reconsideration of the Competitive Telecommunications Association, *Applications of Ameritech Corp. Transferor and SBC Communications, Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines,* CC Docket No. 98-141, ASD File No. 99-49 (October 19, 2000).

[238] Petition for Reconsideration of the Competitive Telecommunications Association, *Applications of Ameritech Corp. Transferor and SBC Communications, Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines,* CC Docket No. 98-141, ASD File No. 99-49 (Oct. 10, 2000) ("CompTel Petition") at 2-3.

NGDLC architecture, such as Project Pronto, enables competitors to access the network SBC is spending billions to roll out.[239]

As discussed above, the Commission should not credit the argument that Project Pronto need not be unbundled because the Project Pronto network, as a whole, is packet switching.[240] SBC argues that its "Broadband Service includes elements and equipment that the Commission has already expressly decided are *not* UNEs under the Act,"[241] and "not required by the *UNE Remand Order*."[242] As the record demonstrates, however, this reading of the Commission's rules on packet-switching is unsustainable and Commission clarification should disabuse SBC and other ILECs of this notion. ILECs, therefore, must make the broadband UNE available whenever a CLEC cannot collocate a line card or traditional DSLAM at the remote terminal.[243] This is *not* the same as an unregulated, untariffed and temporary resale service offering, such as the SBC "Broadband Service".[244] The record supports Commission action to require ILECs to make available an unbundled broadband loop to facilities-based CLECs collocated in the central office.[245]

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[239] Rhythms Comments at 69; *see also* Allegiance CompTel Comments at 4; *see* CompTel Petition at 1.

[240] SBC Comments at 61-63; SBC CompTel Comments at 8; *see also* IP Communications CompTel Comments at 8.

[241] SBC CompTel Comments at 6; *see also* SBC Comments at 54-57.

[242] SBC CompTel Comments at 6; *see also* SBC Comments at 56.

[243] Rhythms Comments at 92-94.

[244] *See* CompTel Petition at 1.

[245] Rhythms Comments at 94; Focal Communications Comments at 31; Joint Commenter Comments at 83; CoreCom Comments at 49; Mpower Comments at 53; CTSI Comments at 45; DSLNet Comments at 19; Telergy Comments at 53.

CONCLUSION

For all the reasons stated in Rhythms initial and reply comment, Rhythms respectfully requests that the Commission conclude as follows:

1. Equipment is "necessary" so long as it is "directly related to" interconnection and access to unbundled elements and an inability to collocate such equipment would interfere with a CLEC's ability to compete effectively and efficiently. Accordingly, § 51.5 and § 51.323(b) should be modified as set forth in the attached Rules Appendix.

2. With regard to collocated equipment, there is a presumption that if a CLEC requests to collocate a particular functionality for interconnection or access to UNEs, then the equipment containing that functionality is "necessary". In any ILEC challenge to this presumption, the ILEC shall bear the burden of proof that the equipment does not meet the standard set out in 51.323(b). Until conclusion of such challenge, the ILEC must permit the equipment to be collocated. Accordingly, § 51.323 should be modified to add new § 51.323(m) as set forth in the attached Rules Appendix.

3. ILECs must allow competing carriers to construct their own cross-connections or obtain cross-connections from the ILEC to interconnect with the equipment of other competitive carriers inside the ILEC premises. Accordingly, the Commission should retain its existing § 51.323(h).

4. ILECs must consider and accommodate competition when designing their networks and to coordinate with CLECs in the planning, design and implementation of the network. Accordingly, § 51.307 should be modified and a new § 51.324 should be added as set forth in the attached Rules Appendix.

5. Unbundling obligations apply as the network evolves. ILEC network changes do not exempt them from section 251 unbundling obligations. Accordingly, § 51.307 should be modified as set forth in the attached Rules Appendix.

6. ILECs must unbundle their networks, regardless of the technologies deployed in the network. Accordingly, § 51.307 should be modified as set forth in the attached Rules Appendix.

7. Section 256 requires Commission oversight network upgrades and implementation to ensure that competitors are provided with full range of entry opportunities envisioned by the Act. Accordingly, a new § 51.324 should be added as set forth in the attached Rules Appendix.

8. In order to ensure that section 256 is fully implemented, the Commission will participate in industry-standard setting activities concerning network

interoperability. Accordingly, a new § 51.324 should be added as set forth in the attached Rules Appendix.

9. The existing loop UNE, as defined from the CO to the end user, applies to all loops, regardless of the technology used to provision that loop, and must be provided to any requesting CLEC to provide any type of service, including xDSL-based services. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

10. The current rules on unbundled loops apply to loops provided over Digital Loop Carrier system, and apply regardless of the services that the CLEC will provide over that loop, including expressly a CLEC's provision of xDSL services over that loop. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

11. ILECs must make all loops, regardless of the technology used in the loop, available to CLECs, including OSS and other features, functions and capabilities of loops served over NGDLC. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

12. CLECs are entitled to nondiscriminatory unbundled access to subloops in an NGDLC architecture, including the copper distribution, copper feeder and fiber feeder at any technically feasible point in the network. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

13. The requirement that ILECs unbundle subloop elements has and continues to apply to unbundled copper and fiber feeder facilities. In addition, it is technically feasible for ILECs to provide unbundled lit fiber feeder subloops and ILECs must immediately permit CLECs to obtain unbundled lit fiber subloops between the DLC and the central office. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

14. The requirement that ILECs unbundle subloop elements has and continues to apply to unbundled copper and fiber distribution facilities. Specifically, the Commission should direct ILECs to unbundle distribution facilities that consist in part of fiber as part of an unbundled distribution UNE subloop. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

15. CLECs obtaining dark fiber subloop or transport UNEs have the right to use such UNEs in the same manner and for the same term as any other UNE. Accordingly, ILECs cannot unilaterally withdraw provision of dark fiber once a requesting carrier has been provided that dark fiber.

16. ILECs must unbundle such other subloop elements as are requested by CLECs in order to ensure that CLECs have the ability to interconnect with the ILEC network, and utilize only those ILEC facilities, necessary for the efficient build-out of CLEC facilities. Accordingly, ILECs must unbundle various loop portions,

including subloop fiber feeder, subloop copper feeder and subloop copper distribution. CLECs should be able to purchase any or all of these subloop UNEs, alone or in combination. Further, ILECs should not unbundle existing subloop combinations unless requested to do so by the CLEC. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

17. The requirement that ILECs need not unbundle packet switching, except for in certain circumstances, does not apply to the ATM transmission of packetized data. The conditions for providing packet switching, which contemplate the incumbent's provision of service to itself, also include provision of service to its affiliate. Accordingly, § 51.319(c)(4) should be modified as set forth in the attached Rules Appendix.

18. ILECs must unbundle the DSLAM on fiber fed loops when CLEC are precluded from placing their traditional DSLAM or line card in the RT. Accordingly, § 51.319(c)(4) should be modified as set forth in the attached Rules Appendix.

19. ILECs must give CLECs access to spare copper. Accordingly, § 51.319(a) should be modified as set forth in the attached Rules Appendix.

20. Consistent with § 51.315, where ILECs cannot accommodate line card collocation at the remote terminal, including for technical reasons such as older generation DLC, they must offer CLECs the ability to purchase a UNE or UNE Combination from the end user to the central office.

21. Consistent with § 51.315, ILECs must make available an unbundled broadband loop to facilities-based CLECs collocated in the central office.

22. Consistent with § 51.315, ILEC resale of broadband service offerings, such as SBC's service offering, do not satisfy the ILECs' unbundling obligations in an NGDLC network.

23. Consistent with existing Commission rules and policies, ILECs' obligation to unbundle transport applies to fiber facilities included in the ILEC loop plant.

24. The current rules on interconnection permit a carrier to interconnect with the ILEC through placement of a line card in a remote terminal.

25. An ILEC's physical remote terminal collocation offering must include all feasible collocation options, including permitting telecommunications carriers to physically or virtually collocate their own line cards in the RT DLC. Accordingly, § 51.323 should be modified to add new § 51.323(k)(4) as set forth in the attached Rules Appendix.

26. A national space reservation policy will ensure that ILECs reserve space at their premises on a reasonable and nondiscriminatory basis, including adoption of shorter reservation timeframes for remote terminal structures due to the fact that these structures are smaller in nature and more likely to reach space exhaustion in

a shorter period of time. ILECs also cannot unilaterally reclaim space reserved within the ILEC premises for future collocation by any CLEC. Accordingly, consistent with this conclusion, the Commission should modify its existing § 51.323(f) to reflect adoption of national policy on space reservation.

27. ILECs must provide CLECs with access to information showing space availability at the premises and permit CLECs to specify their space preference in any unused space within the premises to place their equipment. ILECs must adhere to the CLEC's space preference, unless able to demonstrate to the state commission good cause that CLEC's preference is not technically feasible. Accordingly, consistent with this conclusion, the Commission should modify its existing § 51.321(h) to reflect adoption of national policy on space reservation.

28. ILECs must comply with the following maximum collocation intervals:

Caged Physical Collocation (incl. shared):	60 calendar days from receipt of application.
Cageless Collocation:	30 calendar days from receipt of application.
Adjacent Collocation:	30 calendar days from receipt of application.
Virtual Collocation:	30 calendar days from receipt of application.
Remote Terminal Collocation:	30 calendar days from receipt of application.
ILEC Modifications Made:	45 calendar days from receipt of application.
CLEC Modification Made:	0 days.

Accordingly, § 51.323(l) should be modified as set forth in the attached Rules Appendix.

29. ILEC shall not enter into any contract with any third party that would in restrict the right of CLECs to collocate equipment at the ILEC remote terminal, or interconnect to equipment located in the remote terminal through adjacent arrangements.

30. ILECs must provide information to the CLECs about the geographics, demographics, capabilities and capacities of the remote terminals deployed and planned for deployment. Accordingly, consistent with this conclusion, the Commission should modify its existing § 51.321(h) to reflect adoption of national network disclosure policies.

Accordingly, Rhythms respectfully requests the Commission to adopt the rule modifications set forth in the attached Rules Appendix.

Respectfully submitted,

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RULES APPENDIX

Part 51 of Title 47 of the Code of Federal Regulation is be amended as follows:

PART 51 -- INTERCONNECTION

1. Section 51.5 revised to read as follows:

§ 51.5 Terms and definitions.

* * *

Equipment necessary for interconnection or access to unbundled network elements. For purposes of section 251(c)(2) of the Act, equipment with functions directly related to interconnection, either directly or indirectly, with an incumbent local exchange carrier's network for the transmission and routing of telephone exchange service, exchange access service, or both. For the purposes of section 251(c)(3) of the Act, equipment with functions directly related to access, either directly or indirectly, to an incumbent local exchange carrier's unbundled network elements for the provision of a telecommunications service.

* * *

2. Section 51.307(f) added to read as follows:

§ 51.307 Duty to provide access on an unbundled basis to network elements.

* * *

(f) The duty to provide access to unbundled network elements pursuant to section 251(c)(3) of the Act applies as incumbent LEC networks evolve. Incumbent LECs must undbundle their networks, regardless of the technologies deployed in the network, so long as it is technically feasible, and may not preclude competitive LEC access to unbundled network elements through network upgrades or changes. The duty to provide unbundled network elements applies to any incumbent LEC network facilities.

3. Section 51.315 revised to read as follows:

§ 51.315 Combination of unbundled network elements.

* * *

(b) Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently combines, including subloop elements provided in conjunction with next generation digital loop carrier systems.

* * *

(d) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements with elements possessed by the requesting telecommunications

carrier in any technically feasible manner, including line cards in next generation digital loop carrier systems.

* * *

4. Section 51.319 revised to read as follows:

§ 51.319 Specific unbundling requirements.

(a) *Local loop and subloop.* An incumbent LEC shall provide nondiscriminatory access, in accordance with § 51.311 and section 251(c)(3) of the Act, to the local loop and subloop, including inside wiring owned by the incumbent LEC, on an unbundled basis to any requesting telecommunications carrier for the provision of a telecommunications service. The incumbent LEC shall unbundled access to loop and subloop network elements over existing and future network technology, including next generation digital loop carrier and regardless of the services that will be provided over the facilities, including line shared data services or services provisioned using digital subscriber line technology.

(1) *Local loop.* The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the incumbent LEC. The local loop network element applies regardless of the technology used to provision that loop, including next generation digital loop carrier and regardless of the services that will be provided over the loop, including line shared data services or services provisioned using digital subscriber line technology. The local loop network element includes all features, functions, and capabilities of such transmission facility. Those features, functions, and capabilities include, but are not limited to, dark fiber, attached electronics (except Digital Subscriber Line Access Multiplexers exempt under subsection (c)(4)), and line conditioning. The local loop includes, but is not limited to, copper, including spare copper, DS1, DS3, fiber, and other high capacity loops.

(2) *Subloop.* The subloop network element is defined as any portion of the loop that is technically feasible to access at terminals in the incumbent LEC's outside plant, including inside wire. Subloop network elements include, but are not limited to, the copper distribution, the copper feeder, and the lit fiber feeder portion of the loop. Incumbent LECs must make any or all of these subloop elements available to competitive LECs. In addition, at the request of a competitive LEC, the incumbent LECs must unbundle such other subloop elements as are requested by CLECs. A subloop network element includes all features, functions, and capabilities of such facility. An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole or pedestal, the network interface device, the minimum point of entry, the single point of interconnection, the main distribution frame, the remote terminal, and the feeder/distribution interface.

* * *

(c) *Switching capability.*

* * *

(4) Digital Subscriber Line Access Multiplexers capability.

(A) For purposes of this section, the Digital Subscriber Line Access Multiplexers capability network element is defined as the functions that are performed by Digital Subscriber Line Access Multiplexers, including DSLAM capability incorporated into digital loop carrier line cards with the ability to terminate copper customer loops (which includes both a low band voice channel and a high-band data channel, or solely a data channel). The DSLAM capability network element does not include the ATM transport of packetized data from the remote terminal to the ATM switch in the central office.

(B) An incumbent LEC shall be required to provide nondiscriminatory access to unbundled DSLAM capability where any of the following conditions are satisfied.

(i) The incumbent LEC has deployed digital loop carrier systems, including but not limited to, next generation digital loop carrier, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end user to remote terminal, pedestal or environmentally controlled vault);

(ii) There are no spare copper loops capable of supporting xDSL services the requesting carrier seeks to offer;

(iii) The incumbent LEC has not permitted a requesting carrier to deploy a Digital Subscriber Line Access Multiplexer, including at the carriers request a line card, in the remote terminal, pedestal or environmentally controlled vault, nor has the requesting carrier obtained a virtual collocation arrangement at these subloop interconnection points as defined by paragraph (b) of this section; or

(iv) The incumbent LEC has deployed packet switching capability for its own use, including for its affiliates use.

* * *

(g) *Operations support systems.* An incumbent LEC shall provide nondiscriminatory access in accordance with § 51.311 and section 251(c)(3) of the Act to operations support systems on an unbundled basis to any requesting telecommunications carrier for the provision of a telecommunications service. Operations support system functions consist of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's databases and information. An incumbent LEC, as part of its duty to provide access to the pre-ordering function, must provide the requesting carrier with nondiscriminatory access to the same detailed information about the loop that is available to the incumbent LEC. An incumbent LEC, as part of its duty to provide access to the provisioning, maintenance and repair functions, must provide the requesting carrier with nondiscriminatory, partitioned access to the embedded operational communications channel, including element manager capabilities, that is available to

the incumbent LEC.

(h) *High frequency portion of the loop.*

(1) The high frequency portion of the loop network element is defined as the frequency range above the voiceband on a loop facility that is being used to carry analog circuit-switched voiceband transmissions, as well as transmission of those signals over the fiber portion of a loop.

* * *

(6) Digital loop carrier systems. Incumbent LECs must provide to requesting carriers unbundled access to the high frequency portion of the loop at the remote terminal as well as the central office, pursuant to § 51.319(a)(2) and § 51.319(h)(1). Incumbent LECs must provide the high frequency portion of the loop to requesting carriers regardless of the loop type used to serve the customer, including metallic, lit fiber or combined metallic and fiber facilities.

* * *

5. Rule 51.323 revised to read as follows:

Sec. 51.323 Standards for physical collocation and virtual collocation.

* * *

(b) An incumbent LEC shall permit the collocation of equipment necessary for interconnection or access to unbundled network elements. Equipment is "necessary" so long as it is directly related to interconnection and access to unbundled elements and an inability to collocate such equipment would interfere with a CLEC's ability to compete effectively and efficiently. * * * Equipment directly related to interconnection and access to unbundled network elements includes, but is not limited to:

(1) Transmission equipment including, but not limited to, optical terminating equipment and multiplexers, and

(2) Equipment being collocated to terminate basic transmission facilities pursuant to Secs. 66.1401 and 64.1402 of this chapter as of August 1, 1996.

(3) Digital subscriber line access multiplexers (including line cards), routers, asynchronous transfer mode multiplexer and remote switching modules.

* * *

(f) An incumbent LEC shall allocate space for the collocation of the equipment identified in paragraph (b) of this section in accordance with the following requirements:

* * *

(3) When planning renovations of existing facilities or constructing or leasing new facilities, including but not limited to central office, vaults, huts, cabinets and remote terminals, an incumbent LEC shall take into account projected competitive demand for collocation of equipment;

* * *

(k) An incumbent LEC's physical collocation offering must include the following:

* * *

(4) *Remote Terminal Collocation Arrangement.* Incumbent LECs must make available physical and virtual collocation at remote terminals, including but not limited to vaults, huts and cabinets. An incumbent LEC's remote terminal collocation offering shall include all feasible collocation options, including competitive carrier placement of compatible line cards in the remote terminal digital loop carrier equipment. Collocation at a remote terminal shall also enable a competitive LEC to place equipment in a rack, partial rack or shelf, without minimum space requirements. Such equipment may be commingled with the equipment of the incumbent LEC or other competitive LEC equipment in the remote terminal. In making remote terminal collocation arrangements available, an incumbent LEC may not require competitors to use an intermediate interconnection arrangement in lieu of direct connection to the incumbent's network if technically feasible.

(l) An incumbent LEC must offer to provide and provide all forms of physical collocation (i.e., caged, cageless, shared, adjacent and remote terminal) within the following deadlines, except to the extent a state sets its own deadlines or the incumbent LEC has demonstrated to the state commission that physical collocation is not practical for technical reasons or because of space limitations.

* * *

(2) Except as stated in paragraphs (l)(3) and (l)(4) of this section, an incumbent LEC must complete provisioning of a requested collocation arrangement within the intervals specified below after receiving an application that meets the incumbent LEC's established collocation application standards:

Caged Physical Collocation (incl. shared):	60 calendar days from receipt of application.
Cageless Collocation:	30 calendar days from receipt of application.
Adjacent Collocation:	30 calendar days from receipt of application.
Virtual Collocation:	30 calendar days from receipt of application.
Remote Terminal Collocation:	30 calendar days from receipt of application.
ILEC Modifications Made:	45 calendar days from receipt of application.
CLEC Modification Made:	0 days.

* * *

(m) *Presumption.* With regard to collocated equipment, there is a presumption that if a CLEC requests to collocate a particular functionality for interconnection or access to UNEs, then the equipment containing that functionality is "necessary". In any ILEC challenge to this presumption, the ILEC shall bear the burden of proof that the equipment does not meet the standard set out in 51.323(b). Until conclusion of such challenge, the ILEC must permit the equipment to be collocated.

6. New § 51.324 added, to read as follows:

§ 51.324 Industry Coordination and Oversight of network upgrades and changes.

(a) In order to ensure compliance with § 51.307(f), an incumbent LEC must consider and accommodate competition when designing changes or upgrades to the network and must coordinate with competitive LECs in the planning, design and implementation of the network.

(b) The Commission will oversee network upgrades and implementation to ensure that competitors are provided with full range of entry opportunities envisioned by the Act, including participation in industry-standard setting activities concerning network interoperability.

(c) The principles in (a) and (b) apply to network changes deploying Digital Loop Carrier system ("DLC"), including next generation DLC. Notwithstanding the *SBC Pronto Order*:

(1) Allowing an incumbent LEC to own ADLU Digital Loop Carrier system ("DLC") plug-in line cards used to support both analog voice and ADSL-based advanced data services in no way affects, limits, or restricts the right and ability of competitive LECs to own a variety of DLC line cards supporting the full range of xDSL technologies offered by the DLC manufacturer, and the right and ability of competitive LECs to plug any such line cards into incumbent LECs' DLCs via physical or virtual collocation, at the option of the competitive LEC.

(2) Incumbent LECs must allow competitive LECs to physically and virtually collocate, in incumbent LEC DLC channel bank chassis located in controlled environmental vaults, huts or cabinets, plug-in line cards supporting any xDSL technology that is presumed technically feasible pursuant to FCC rules. Specifically, incumbent LECs must allow the installation of any competitive LEC-owned line card manufactured to technical specifications compatible with the DLC channel bank chassis (*e.g.*, line cards manufactured by the DLC vendor), regardless of whether the incumbent LEC deploys service(s) based on such technology itself or on behalf of any incumbent LEC affiliate, or whether any incumbent LEC affiliate deploys service(s) based on such technology.

(3) The definition of a UNE loop encompasses all loop facilities between an SBC incumbent LEC central office termination/interconnection point and a demarcation point at an end user premises, and includes all copper and fiber facilities between these two end points, as well as any associated electronic equipment located in the central office and/or in outside plant locations, regardless of whether the electronic equipment in outside plant locations includes Digital Subscriber Line Access Multiplexer ("DSLAM") functionality.

(4) Loops configured as fiber-fed DLC loops must be further unbundled by incumbent LECs pursuant to section 251(c)(3) of the Act, and offered to competitive LECs in their individual subloop components, including (i) the bandwidth required by competitive LECs on the fiber subloop between the termination/interconnection point at the central office and the line card side of the DLC located at a remote terminal, (ii) the DLC plug-in line card, and (iii) the copper subloop between the DLC at the remote terminal and the demarcation point at the customer premises.

(5) A competitive LEC may purchase one or more fiber-fed DLC subloop components, at its option, and may combine any such subloop component(s) with its own equipment and/or facilities. A competitive LEC may connect the fiber subloop and the copper subloop by physically or virtually collocating a DLC plug-in card. If a competitive LEC purchases all three fiber-fed DLC subloop components for a particular loop ("fiber-fed DLC loop platform"), the incumbent LEC shall not disassemble or disconnect the subloop components and/or require the competitive LEC to reassemble or reconnect the subloop components, except upon request from a competitive LEC.

(6) A combined DSL/POTS DLC plug-in line card is subject to the unbundling requirements of section 251(c)(3) of the Act.

(7) Pursuant to incumbent LECs' section 251(c)(3) unbundling obligation, incumbent LECs must provide competitive LECs with all technical capabilities associated with a fiber-fed DLC loop provisioned with an ADLU DLC plug-in line card, including, but not limited to:

(i) the ability to specify any Asynchronous Transfer Mode ("ATM") Quality of Service ("QoS") class supported by the manufacturer of the ATM Switch/Optical Concentration Device ("ATM Switch/OCD") and ADLU DLC plug-in card, including (1) Constant Bit Rate, (2) Real-time Variable Bit Rate, (3) Non-real-time Variable Bit Rate, (4) Available Bit Rate, and (5) Unspecified Bit Rate.

(ii) the ability to establish multiple virtual circuits per port

(iii)the ability to provision all ADSL parameters (including, but not limited to, maximum and minimum line rates, target signal to noise margin, fast path and/or interleave path, interleave depth/delay, operating mode, and error thresholds)

(iv)the ability to monitor and troubleshoot ports, system cards, and other equipment for outages of all port-level conditions (port up/down, bit rate up/down, traffic cells received/transmitted per port, errors per port (*e.g.*, near end/far end, retrain number and type)

(v) the ability to oversubscribe truck capacity and meet service level agreement ("SLA") requirements without sharing bandwidth with other carriers.

(vi) the ability to monitor SLA parameters

(vii) the ability to access management software via API or similar interface

(viii) ATM-level provisioning of multiple ATM virtual circuits per port

(8) Incumbent LECs must allow competitive LECs, at competitive LECs' option, to (i) using incumbent LEC-provided tie cables, connect its facilities and equipment collocated at the incumbent LEC's central office to the ATM Switch/OCD in order to access the UNE loop or subloop; (ii) order UNE transport from the incumbent LEC, to be connected to the ATM Switch/OCD in order to access the UNE loop or subloop; or (iii) order UNE transport from a third-party carrier, to be connected to the ATM Switch/OCD in order to access the UNE loop or subloop.

(9) Incumbent LECs must provide the High Bandwidth UNE to data competitive LECs using the fiber-fed DLC loop configuration. This UNE shall use the same copper pair

entering the end user premises as does the incumbent LEC or voice competitive LEC analog voice service. At the incumbent LEC central office, this UNE shall be accessed by the data competitive LEC at the ATM Switch/OCD in the same manner as described in Paragraph 8.

(10) To the extent an incumbent LEC seeks to transfer to any incumbent LEC affiliate any ATM/IP Switch(es)/OCD(s) and/or DLC line card(s) deployed, purchased, or installed by an incumbent LEC, that incumbent LEC affiliate shall be deemed to be a successor or assign of the incumbent LEC pursuant to section 251(h) of the Act and must provide competitive LECs with access to any such ATM/IP Switch(es)/OCD(s) and/or DLC line card(s), pursuant to section 251(c)(3) of the Act.

(11) Section 251(c)(2) imposes an independent obligation on incumbent LECs to permit technically feasible interconnection with the incumbent LEC network at remote terminals and other intermediate loop concentration or connection points.

(12) Incumbent LECs must offer all unbundled network elements discussed in these conditions, including the High Bandwidth UNE and the fiber-fed DLC loop platform, to competitive LECs at prices that fully comply with the Commission's UNE pricing methodology.

(13) Incumbent LECs must maintain and support existing copper loops terminating in central offices with remote terminals in a condition that permits them to be used by competitors to provide DSL service. In addition, the Commission must clarify that no customer currently served by any competitive LEC using xDSL technology over copper loop facilities may be migrated to fiber-based facilities without the express permission of the competitive LEC.

(14) When incumbent LECs acquire DLC systems, OCDs, or other loop technologies, they must use their best efforts to provide all features functions, and capabilities of that equipment to support unbundled access to that equipment, including acquiring intellectual property rights from the equipment manufacturer that would facilitate full competitive LEC access to the features functions and capabilities of that equipment.